

Attorney Docket No.: BI-0004US.P1
Inventor: Simons and Gao
Serial No.: 09/426,011
Filing Date: October 25, 1999
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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-10 (canceled).

Claim 11 (currently amended): A family of PR-39 derived oligopeptides whose members individually cause a selective inhibition of proteasome-mediated degradation for at least one identifiable peptide in-situ after introduction intracellularly to a viable cell, each member of said PR-39 derived oligopeptide family ~~comprising~~ consists of:

a peptide of 8 to 11 amino acid residues in length; ~~a peptide comprising with~~ the N-terminal amino acid sequence of Arg-Arg-Arg-Pro-Arg-Pro-Pro-Tyr (SEQ ID NO:5);

a peptide which is devoid of the amino acid residue sequences Pro-Pro-X-X-Pro-Pro-X-X-Pro and Pro-Pro-X-X-X-Pro-Pro-X-X-Pro where X is any amino acid;

a peptide able to be introduced intracellularly to a viable cell;

a peptide able to interact selectively in-situ with such proteasomes as are present within the cytoplasm of the cell; and

a peptide able to alter markedly the proteolytic degradation of at least one identifiable peptide mediated by said interacting proteasomes such that an increased expression of said identifiable peptide occurs in-situ.

Claims 12-14 (canceled).

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Claim 15 (previously presented): The PR-39 derived oligopeptide family as recited in claim 11 whose membership includes a peptide of 11 amino acid residues and whose sequence is Arg-Arg-Arg-Pro-Arg-Pro-Pro-Tyr-Leu-Pro-Arg (SEQ ID NO:4).

Claim 16 (previously presented): The PR-39 derived oligopeptide family as recited in claim 11 whose membership includes a peptide of 8 amino acid residues and whose sequence is Arg-Arg-Arg-Pro-Arg-Pro-Pro-Tyr (SEQ ID NO:5).